## Amendments to the Drawings:

A first attached sheet of drawings includes changes to Fig. 2. This sheet, which includes Fig.2, replaces the original sheet including Fig. 2.

A second attached sheet of drawings includes changes to Fig. 4. This sheet, which includes Fig. 4, replaces the original sheet including Fig. 4.

A third attached sheet of drawings includes changes to Fig. 32. This sheet, which includes Fig. 32, replaces the original sheet including Fig. 32.

A fourth attached sheet of drawings includes changes to Fig. 36. This sheet, which includes Fig. 36, replaces the original sheet including Fig. 36.

Attachment: Four Replacement Sheets

#### REMARKS

Claims 1 to 20 were pending in the application at the time of examination. The restriction requirement was made final. Claims 11 to 14 and 16 to 19 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Claims 1 to 4, 6 to 9, 11 to 14, and 16 to 19 stand rejected as obvious.

Applicant has amended paragraphs [0001] to [0005] to remove the Attorney Docket Numbers and to properly reflect the status of the U.S. Patent Applications cited therein.

Applicant has amended paragraph [0017] to provide the term commonly associated with "ATM networks."

In Fig. 1, reference numerals 120, 115, and 140 were not mentioned in the description. Applicant has amended paragraph [0009] of the description to include reference numerals 120, 115, and 140 for the elements corresponding to those reference numerals in Fig. 1. Thus, the amendment to the description obtains correspondence between the description and Fig. 1.

In Fig. 2, reference numeral 218 is used to designate both the "numeric keyboard" and the "alphanumeric keyboard." In the enclosed replacement sheet for Fig. 2, the reference numeral for the alphanumeric keyboard has been changed to "219" and a corresponding change made in paragraph [0032] to obtain correspondence between the description and Fig. 2. Applicant respectfully requests entry of the replacement sheet.

In Fig. 3, reference numerals 325, 330, 335, 340, and 370 were not mentioned in the description. Applicant has amended paragraphs [0035] and [0039] of the description to include reference numerals 325, 330, 335, 340, and 370 for the elements corresponding to those in Fig. 3. With respect to reference numeral 325, the structure depicted in Fig. 3 was described in the description. Thus, the amendments to the description obtain correspondence between the description and Fig. 3.

In Fig. 4, reference numeral 485 was used for both the "obfuscation descriptor" and the "virtual machine." In the enclosed replacement sheet for Fig. 4, the reference numeral for the virtual machine has been changed to "491" and corresponding changes made in paragraphs [0040], [0041] to obtain correspondence between the description and Fig. 4. Applicant respectfully requests entry of the replacement sheet.

Reference number 495 in paragraph [0043] was not shown in the drawings. Applicant respectfully notes that in Fig. 4, the virtual machine identifier is not shown as a separate element. Accordingly, reference numeral 495 was deleted in paragraph [0043] to obtain correspondence between the drawings and the specification.

Reference numerals 430, 435, 440, and 470 in Fig. 4 were not mentioned in the description. Applicant has amended paragraph [0043] of the description to include reference numerals 430, 435, 440, and 470 for the elements having those reference numerals in Fig. 4. In particular, a description was added based on the elements in Fig. 4 and the corresponding description for similar elements in Fig. 3. Thus, the amendments to the description obtain correspondence between the description and Fig. 4 and do not constitute new matter.

In Fig. 5B, reference numeral 510 was not mentioned in the description. Applicant has amended paragraph [0051] of the description to include reference numeral 510 for the element having that reference numeral in Fig. 5B.

Reference numeral 550 in Fig. 5C was not mentioned in the description. Applicant has amended paragraph [0052] of the description to include reference numeral 550 for the element having that reference numeral in Fig. 5C. In particular, a description was added based on the element in Fig. 5C. Thus, the amendment to the description obtains correspondence between the description and Fig. 5C and does not constitute new matter.

Reference numerals 3100, 3110 and 3114 in Figure 31 were not mentioned in the description. Applicant has amended paragraph [0106] to include a reference to "dispatcher 3100" as shown in Fig. 31. Applicant also has amended paragraph [0106] and [0108] to correct typographical errors in the reference numerals so that reference numeral 3110 is included in the description and reference numeral 3114 is deleted. Thus, the amendments to the description obtain correspondence between the description and Fig. 31 and do not constitute new matter.

Reference numerals 3220 and 3250 in Figure 32 were not mentioned in the description. Applicant has amended paragraph [0113] of the description to include reference numerals 3220 and 3250 for the elements having those reference numerals in Fig. 32. The amendments to the description obtain correspondence between the description and Fig. 32 and do not constitute new matter. Also, in element 3250 of Fig. 32, the word "Stream" is misspelled. Applicant has provided a replacement sheet with the correction. Applicant respectfully requests entry of the replacement sheet with Fig. 32.

Reference numerals 3610 and 3615 in Fig. 36 were not mentioned in the description. Applicant has submitted a replacement sheet for Fig. 36 in which reference numerals 3610 and 3615 have been removed. Fig. 36 does not include any information about these reference numerals and elements do not appear in the description that could be associated with these reference numerals. Thus, these reference numerals appear extraneous and so were deleted. Applicant respectfully requests entry of the replacement sheet with Fig. 36.

Applicant has amended paragraph [0036] to correct a typographical error.

Applicant has amended paragraph [0040] to correct the name of the element associated with reference numeral 482 to obtain correspondence between the drawings and the description.

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Applicant has amended paragraph [0051] to correct a typographical error and thereby obtain correspondence between the drawings and the description.

Applicant has amended paragraph [0085] to correct a typographical error.

Applicant has amended paragraph [0086] to correct a typographical error and thereby obtain correspondence between the drawings and the description.

Applicant has amended paragraph [0094] to correct a typographical error and thereby obtain correspondence between the drawings and the description.

Applicant has amended paragraph [0096] to correct a typographical error and thereby obtain correspondence between the drawings and the description.

Applicant has amended paragraph [0098] to correct a typographical error and thereby obtain correspondence between the drawings and the description.

Applicant has amended paragraph [0101] to correct typographical errors and thereby obtain correspondence between the drawings and the description.

Applicant has amended paragraph [0125] to correct a typographical error and thereby obtain correspondence between the drawings and the description.

#### Restriction Requirement

The restriction requirement was made final. The rationale stated "the MPEP does not draw a distinction between subcombinations and process of making and using."

The rationale also stated "However, there is no guideline on just process of making and using."

With all due respect, this is clear error and mischaracterizes the express teachings of the MPEP. The process of making and the process of using are related processes. The MPEP states:

Various pairs of related inventions are noted in the following sections. In applications claiming

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inventions in different statutory categories, only one-way distinctness is generally needed to support a restriction requirement. See MPEP § 806.05(c) (combination and subcombination) and § 806.05(j) (related products or related processes) for examples of when a two-way test is required for distinctness.

MPEP § 806.05, 8<sup>th</sup> Ed., Rev. 5, pg. 800-44 (Aug. 2006).

Thus, as previously stated by Applicant and expressly stated by the MPEP, directions are provided, in different sections of the MPEP for combination/subcombinations (MPEP § 806.05(c)) and related processes (MPEP § 806.05(j)). The above quoted characterization of the MPEP ignores the fact that the MPEP cites to two different sections. Moreover, this demonstrates that the statements made by Applicant were correct and should have been considered instead of being summarily dismissed as incorrect.

For two related processes, a process of making and a process of using as recited in Claims 1 and 5, the MPEP requires:

## 806.05(j)Related Products; Related Processes [R-5]

To support a requirement for restriction between two or more related product inventions, or between two or more related process inventions, both two-way distinctness and reasons for insisting on restriction are necessary, i.e., separate classification, status in the art, or field of search. See MPEP § 808.02. See MPEP §c) for an explanation of the requirements to establish two-way distinctness as it applies to inventions in a combination/subcombination relationship. For other related product inventions, or related process inventions, the inventions are distinct if

- (A) the inventions as claimed do not overlap in scope, i.e., are mutually exclusive;
- (B) the inventions as claimed are not obvious variants; and
- (C) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 802.01.

The burden is on the examiner to provide an example to support the determination that the inventions are distinct, but the example need not be documented. (Combination of underline and bold emphasis added. All other emphasis in original.)

Thus, the rationale for continuing the rejection and the statements concerning the MPEP are in clear error. There is a clear guideline on the requirements for restriction of related processes, such as a process of making and a process of using and a statement of at least three considerations that are required. Accordingly, since the MPEP requirements for restriction of two related processes have not been followed and have been expressly stated as not existing in the rejection, there is no basis on the record for the restriction that meets the requirements of the MPEP and it should be withdrawn. Applicant respectfully requests reconsideration and withdrawal of the restriction requirement.

35 U.S.C. § 101 Rejections

Claims 11 to 19 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. The rejection concludes that these claims are directed at software per se.

Applicant respectfully traverses the § 101 rejection of Claims 11 to 19. Applicant notes that Claims 11 to 19 are means plus functions claims that require a specific level of analysis in the claim interpretation, as put forth in the MPEP. Further, software alone cannot accomplish anything and so interpreting the claims as software ignores explicit claim limitations and indicates that the claims were considered in a vacuum and not as required by the MPEP. Applicant points out the following facts to maintain the issues for appeal should that be necessary. First, with respect to claim interpretation in general, the MPEP requires:

\*>USPTO< personnel must first determine the scope of a claim by thoroughly analyzing the language of the claim <u>before</u> determining if the claim complies with each statutory requirement for patentability. (Emphasis in original.)

MPEP § 2106, 8th Ed., Rev. 5, p 2100-6 (August 2006).

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The MPEP further requires:

\*\*>USPTO< personnel are to correlate each claim limitation to all portions of the disclosure that describe the claim limitation. This is to be done in all cases\*\*>, regardless of whether< the claimed invention is defined using means or step plus function language. The correlation step will ensure that \*>USPTO< personnel correctly interpret each claim limitation.

The subject matter of a properly construed claim is defined by the terms that limit its scope. (Emphasis added.)

MPEP § 2106, 8th Ed., Rev. 5, p 2100-7, (August 2006).

Applicant respectfully notes that in view of this correlation of elements, the Examiner is permitted to interpret the claims broadly. However, the MPEP and the courts put specific limitations on the breadth of such an interpretation. Specifically,

# CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." (Emphasis Added.)

MPEP § 2111 8th Ed. Rev. 5, p 2100-37 (August 2006).

With respect to means plus function claims, the MPEP is even more specific as what must be done in the claim interpretation:

\*\*>Where means plus function language is used to define the characteristics of a machine or manufacture invention, such language must be interpreted to read on only the structures or materials disclosed in the specification and "equivalents thereof" that correspond to the recited function. (Emphasis Added).

MPEP § 2106, 8th Ed., Rev. 5, p 2100-7, (August 2006). The specification explicitly provides in part:

[0015] In accordance with one embodiment of the present invention, the components, process steps, and/or data structures may be implemented using various types of operating systems (OS), computing platforms, firmware, computer application programs, computer

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languages, and/or general-purpose machines. The method can be run as an application programmed process running on processing circuitry. The processing circuitry can take the form of numerous combinations of processors and operating systems, or a stand-alone device. The process can be implemented as instructions executed by such hardware, hardware alone, or any combination thereof. The software may be stored on an application program storage device readable by a machine.

[0016] In addition, those of ordinary skill in the art will recognize that devices of a less general purpose nature, such as hardwired devices, field application programmable logic devices (FPLDs), including field application programmable gate arrays (FPGAs) and complex application programmable logic devices (CPLDs), application specific integrated circuits (ASICs), or the like, may also be used without departing from the scope and spirit of the inventive concepts disclosed herein.

[0032] Figure 2 depicts a block diagram of a computer system 200 suitable for implementing aspects of the present invention. As shown in FIG. 2, system 200 includes a bus 202 which interconnects major subsystems such as a processor 204, an internal memory 206 (such as a RAM), an input/output (I/O) controller 208, a removable memory (such as a memory card), an external device such as a display screen 210 via display adapter 212, a roller-type input device 214, a joystick 216, a numeric keyboard 218, an alphanumeric keyboard 218, directional navigation pad 226 and a wireless interface Many other devices can be connected. Wireless network interface 220, wired network interface 228, or both, may be used to interface to a local or wide area network (such as the Internet) using any network interface system known to those skilled in the art.

[0033] Many other devices or subsystems (not shown) may be connected in a similar manner. Also, it is not necessary for all of the devices shown in FIG. 2 to be present to practice the present invention. Furthermore, the devices and subsystems may be interconnected in different ways from that shown in FIG. 2. Code to implement the present invention may be operably disposed in internal memory 206 or stored on storage media such as removable memory 222, a floppy disk or a CD-ROM.

Clearly, the claims were not read in view of the requirements of the MPEP and at least the above description, because to conclude that the claims recite software per se not only ignores the claim language, e.g., software per se

cannot receive anything, it is inanimate, but also the above description were express means for carrying out the functions are described. Nevertheless, in view of at least the above description, Claims 11 to 14 have been amended to include a processor and a memory. Applicant respectfully requests reconsideration and withdrawal of the § 101 rejection of each of Claims 11 to 14.

Claims 16 to 19 expressly recite a particular apparatus and when the above claim requirements are followed, the apparatus is statutory. Software per se cannot send anything and cannot receive anything. Therefore, the Office's interpretation of the claim is not supported by the requirements put further by the Office. Nevertheless, in view of at least the above quoted description, Claims 16 to 19 have been amended to include a processor and a memory. Applicant respectfully requests reconsideration and withdrawal of the § 101 rejection of each of Claims 16 to 19.

### § 103 Rejections

Prior to considering the § 103 rejection, Applicants respectfully note that, as discussed, above, the broadest reasonable interpretation of the claims is limited in that the interpretation must be consistent with the specification. Also, in an obviousness rejection, the MPEP requires that properties inherent in the claims and disclosed in the specification must be considered. Accordingly, each of Claims 1, 6, 11 and 16 have been amended to make explicit that which was at least inherent in the claims when interpreted according to these requirements. The amendments are made to simply avoid discussion on whether Applicant is requesting the examiner to read limitations into the claims.

As is shown, for example, in Fig. 37 the process is performed on an application program provider and so this was an inherent property that was disclosed in the

specification. The applying element is amended to make it clear that both the first and send cryptographic keys are input to the cryptographic process. Finally, the specification provides a definition of "target ID," which the MPEP requires be used in the interpretation of that phrase, is moved explicitly into the claim. ("Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim." MPEP § 2106, p. 2100-7.)

Claims 1-2, 4, 6-7, 9, 11-12, 14, 16-17, and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kessler et al U. S. Patent No. 7,170,999, hereinafter referred to as Kessler, in view of U.S. Patent No. 6,789,177, hereinafter referred to as Okada, in further view of U.S. Patent Application Publication No. 2002/0120854), herein after referred to as Levine, and in further view of Collberg et al, "A Taxonomy of Obfuscating Transformations," Technical Report #148, The University of Auckland, Auckland, New Zealand (1997), hereinafter referred to as Collberg.

Applicant respectfully traverses the obviousness rejection of Claims 1, 6, 11 and 16. Applicant respectfully submits that neither the references nor the claims have been considered as a whole as required by the MPEP in an obviousness rejection and that the basis for the combination of references is not well founded.

Kessler considered a technique for sending an encrypted key, key TK, to a user and that technique did not include any suggestion for obfuscating the encrypted key and did not include an instruction stream for a key decryption program configured to the decryption algorithm for the first cryptographic key as recited in Claim 1. Moreover, Kessler explicitly considered obfuscation and taught that since proprietary software was involved that was already obfuscated, obfuscation of the encrypted key was unnecessary. Therefore, Kessler taught away from the proposed modifications in the rejection.

Specifically, Kessler expressly considered obfuscation, see Col. 9, lines 27 to 51. Kessler, taken as a whole, taught that obfuscation of the encrypted key was unnecessary, because Kessler obfuscated only the file being transferred, i.e., the original music file is first obfuscated, represented as O1(musicfile.mp3) by Kessler. Next, the obfuscated music file is encrypted using key TK and the encrypted obfuscated music file is represented by E(TK, O1(musicfile.mp3)). This encrypted file is then obfuscated again, which Kessler represents as O2(E(TK, O1(musicfile.mp3))). Kessler represents the encrypted key as E(PK2, TK), which means that key TK is encrypted using the public key PK2 of a user. Kessler specifically considered the need for obfuscation and taught that obfuscation of the encrypted key was unnecessary.

Nevertheless, the rejection stated with respect to the motivation "One skilled would have incorporated Collberg's teachings of an obfuscation descriptor because it would allow the receiver of the client software taught by Kessler to choose the level of obfuscation that his/her architecture and operating system is capable of handling." In fact, the user had no control over the proprietary software or the obfuscation in Kessler and Kessler taught that such control was undesirable. Specifically,

As previously discussed, each registered client computer receives proprietary client software. . . . . To provide additional security, the proprietary client software also includes obfuscation and de-obfuscation algorithms. . . . The obfuscation algorithm, the de-obfuscation algorithm, the secret key, and the public key are themselves obfuscated and/or encrypted within the proprietary client software used by the client computer. In this manner, users are unable to perform de-obfuscating and decrypting that might lead to unauthorized file sharing. (Emphasis Added.)

Kessler, Col. 8, lines 50 to 67. Thus, the rationale for the modification of Kessler was specifically considered by Kessler and stated to be undesirable. Further, Kessler

describes means that were implemented to prevent user access and control of the obfuscation. Therefore, the basis for the combination of references is not well founded on several aspects. In particular, Kessler taught the modification was not necessary and further was not desired.

Further, Kessler taught that the keys and the programs for processing the keys were included in the propriety client software. The rejection confuses this proprietary client software with the process for transferring files between clients as taught by Kessler. There is no teaching or suggestion of any need for an obfuscated key decryption program in Kessler. Therefore, when considered as a whole, Kessler has been mischaracterized and misinterpreted in the rejection. Properly interpreted, Kessler teaches away from the Applicant's claims as well as the motivation for the modifications to Kessler.

In addition, the rejection mischaracterizes the secondary references. For example, Collberg is cited as teaching selecting an obfuscation method based on a target ID, i.e.,

Collberg discloses the obfuscation method used for obfuscation being indicated by an obfuscation descriptor, said obfuscation descriptor based at least in part on a target ID (p3, second column, first paragraph and p4, first column, first paragraph)

The second full paragraph in the second column on page three does not mention a target ID, nor does the first paragraph in the first column of page 4. Therefore, the rejection mischaracterized the teachings of Collberg. Collberg fails to suggest or disclose anything with respect to use of a target ID.

Any one of these distinctions is sufficient to overcome the obviousness rejection. Therefore, Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of each of Claims 1, 6, 11 and 16.

With respect to each of the claims dependent from Claims 1, 6, 11 and 16, the additional material relied upon

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from the secondary references, or the new reference with respect to Claims 3, 8, 13 and 18, does not correct the deficiencies of the combination of references with respect to the independent claims from which these claims depend. Therefore, each of Claims 2 to 4, 7 to 9, 11 to 14 and 17 to 19 distinguish over the combination of references for at least the same reasons as the independent claims. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of each of Claims 2 to 4, 7 to 9, 11 to 14 and 17 to 19.

Claims 1 to 20 remain in the application. Claims 1, 6, 11 and 16 have been amended. For the foregoing reasons, Applicant(s) respectfully request allowance of all pending If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant(s).

#### **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 13, 2007.

September 13, 2007 Altorney for Applicant(s)

Date of Signature

Respectfully submitted,

Forrest Gunnison

Attorney for Applicant(s)

Reg. No. 32,899

Tel.: (831) 655-0880